

**REMARKS**

Claims 1-6 are pending. Claim 1 has been canceled and claims 2-4 have been amended. No new matter has been presented.

The drawings were objected to for failing to show every feature of the invention specified in the claims. The Examiner asserts that the step must be shown in the drawings. Applicant respectfully submits that the step referred to in original claim 1 (but now recited in claims 2 and 3) is indeed shown in the drawings. For example, the specification at paragraph [0035] discloses that the layer 9 protrudes in width from the layer 8 and these two layers form a step. Referring to Fig. 1, a step is clearly visible on the left and right sides of the very top of layer 8, where the top part of the step is formed by layer 9 at the portion which hangs over the top of layer 8. Thus, the claimed "step" is shown in Fig. 1. Applicant therefore requests that this objection be withdrawn.

The claims were objected to for minor informalities. These informalities have been corrected in the foregoing claim amendments, and withdrawal of the objection is respectfully requested.

Claims 1-3, 5 and 6 were rejected under 35 USC 102(b) as being anticipated by Ikeda, U.S. Patent 5,956,361. This rejection is respectfully traversed.

Claim 1 has been canceled.

Claim 2 recites "wherein a current constriction layer is provided on both sides of the ridge section, and a portion of the current constriction layer, the portion being located outside a portion brought in contact with the ridge section and having surfaces formed flatly, is formed to have a thickness smaller than a thickness of the second clad layer of the ridge section." The Examiner asserts that layers 109, 110 and 111 correspond to the claimed current constriction layer. However, if these three layers combined are considered to correspond to the one layer which is the

claimed current constriction layer, the Examiner must consider these three layers as one layer in considering the other limitations of the claim. The Examiner has not done this.

The Examiner asserts that the limitation of “the portion being located outside a portion brought in contact with the ridge section . . . is formed to have a thickness smaller than a thickness of the second clad layer of the ridge section” is met by layer 110 (referring to Fig. 1 or Fig. 7B). While it may be true that the combination of layers 109 and 110, at a portion outside the portion brought into contact with the ridge section, is actually thinner than the second clad layer of the ridge section, this is not the case if the combination of layers 109, 110 and 111 is considered. In other words, the combination of these three layers, which the Examiner has stated corresponds to the claimed current constriction layer, is never thinner than the second clad layer at any point, whether it be next to the ridge section or away from the ridge section. Rather, the thickness of the current constriction layer of Ikeda must be considered to always be the thickness of the combination of these three layers. Thus, Ikeda fails to teach or suggest the features of claim 2.

Claim 3 is allowable at least due to its dependency from claim 2.

Claim 5 recites “forming a ridge section comprised of the second clad layer and the upper layers by subjecting the second clad layer and the upper layers to dry etching and subsequently to wet etching.” The Examiner asserts that the dry etching is disclosed at col. 15, lines 41-50, and that the wet etching is disclosed at col. 9, lines 1-2.

Ikeda discloses, at col. 15, lines 41-50, an Example 5, which is stated to differ from Example 1 “in that the step of partially etching the cap layer and the second upper cladding layer and the step of selectively removing the second upper cladding layer are preformed by dry etching.” The disclosure at col. 9, lines 1-2, relates to Example 1, and states that the etching may be, for example, wet etching. However, as disclosed at col. 15, the dry etching is in place of the wet etching disclosed at col. 9, and these are two different embodiments. The Examiner has combined portions of two different embodiments in an effort to recreate the claimed invention, but Ikeda fails to disclose that first the second clad layer and the upper layers are subjected to dry etching and then

they are subjected to wet etching. Ikeda never discloses performing both types of etching methods in sequence, but rather discloses that one method may be used as an alternate to the other method. Thus, Ikeda fails to teach or suggest the features of claim 5.

Claim 6 is allowable at least due to its dependency from claim 5. Accordingly, Applicant requests that this rejection be withdrawn.

Claim 4 was rejected under 35 USC 103(a) as being unpatentable over Ikeda, as applied to claim 1. This rejection is respectfully traversed.

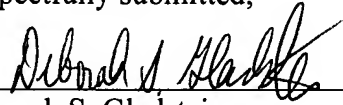
Claim 4 is allowable at least due to its dependency from claim 2. Furthermore, the Examiner appears to be relying on his own knowledge to assert that it would have been obvious to provide an inclined substrate. Applicant respectfully requests that the Examiner cite a reference which supports his assertion that this would have been obvious or withdraw the rejection.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejections of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. 204552028500.

Dated: July 25, 2005

Respectfully submitted,

By   
Deborah S. Gladstein

Registration No.: 43,636  
MORRISON & FOERSTER LLP  
1650 Tysons Blvd, Suite 300  
McLean, Virginia 22102  
(703) 760-7753